

## Energy Transition in Mexico City

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Paris Agreement on Climate Change



A new strategy to fight climate change which includes countries, cities, government, business community and civil society.

Mexico's Energy Transition Act



Establishes the Mexican clean energy obligations system, while fostering competitiveness in key productive sectors.



The Federal Ministry of Energy has faculties to guide, support and strengthen the capacities of local institutions and governments that develop energy efficiency projects.

Cities and Climate Change

54.5% of the world's population lives in cities

This proportion is expected to increase to 60% by 2030.

Cities are the greatest consumers of energy on the planet. Therefore, the actions they take are absolutely critical to fight climate change.

Mexico City and Climate Change

Consumes 22% of all energy in Mexico

30.7 millions of tons of CO<sup>2</sup> yearly

- More than 17% of the national GDP
- More than 9 million inhabitants (+ floating population)
- More than 450 thousand economic units
- More than 4 million jobs

3.
Coordination
Mechanisms
govt society

2. Institutional Framework

# Public Policies

4. Specific projects

1. Legal Framework

5. Financing policies

1

An energy transition policy in CDMX will not be possible without the private sector.



In Mexico City there are 465,566 economic units.

Employees	Total	%
1-10	426,363	92%
11-100	34,398	7%
+100	4,805	1%

► A change towards energy efficiency in SMEs is key.

2

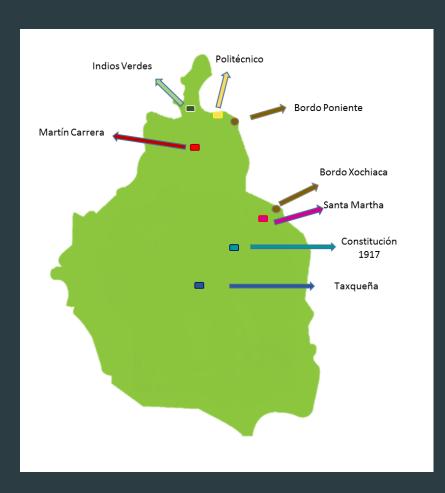
Waste-to-energy is a big opportunity for Mexico City.



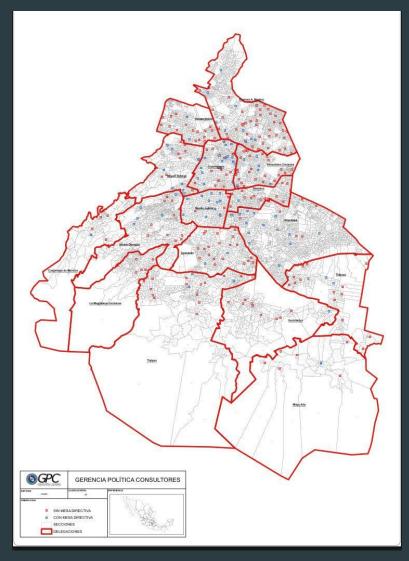
13 thousand tons of waste are generated in Mexico City every day.

70 million tons of trash are accumulated in Mexico City's main landfill.

- Thermovalorization plant in Mexico City's main landfill:
  - ▶ Will provide energy to 517 thousand city lights and 1 thousand 700 public buildings.
  - Savings of 500 million pesos yearly (28 million USD).
- Need for multiple thermovalorization plants.



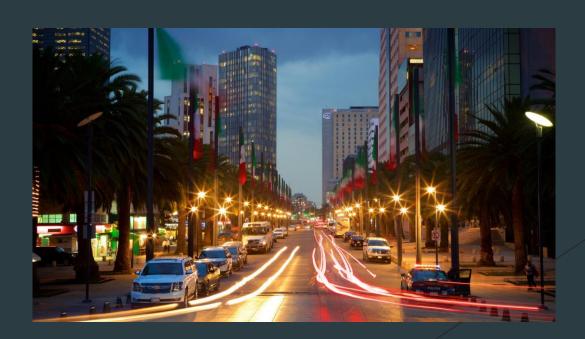
- Land fields
- Multimodal transportation stations



• 329 Public Markets

3

The dimension of Mexico City's infrastructure and public services allows for a big scale transition to sustainable energy.



Metro network: 12 lines 195 stations 226.5 km.

5.5 million passengers

33% from 6 to 9 am



Energy
Consumption/year:
823 million 442
thousand 595
kilowatts

Cost/year:
Two billion pesos
(2,000,000,000,000)

Wagon speed: 40 km/h - 80 km/h

- Mexico City water supply: 30.5 m3/second.
- A person's average consumption is around 307.3 liters.
- Mexico City at the moment has 91 pumping plants.
- Pumping plants generate20 liters per second of water.
- Mexico City requires 22 water treatment plants for an effective supply of water.

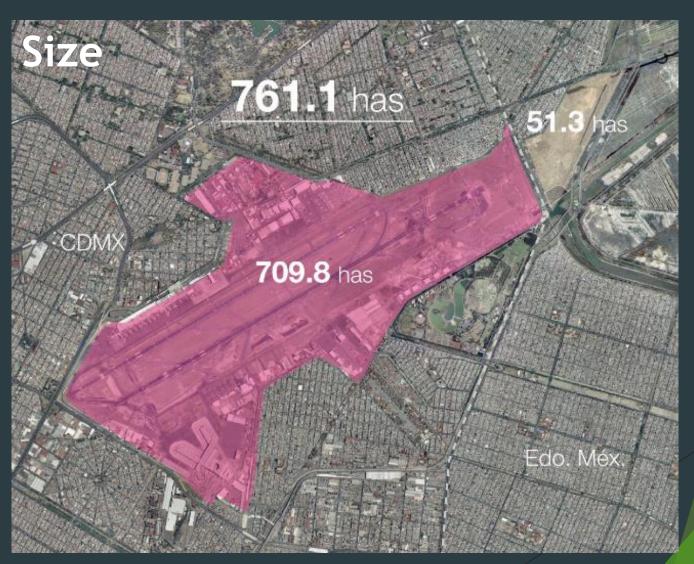
- 40% is lost due to leakage.
- New technology required to an improvement on water & energy savings.



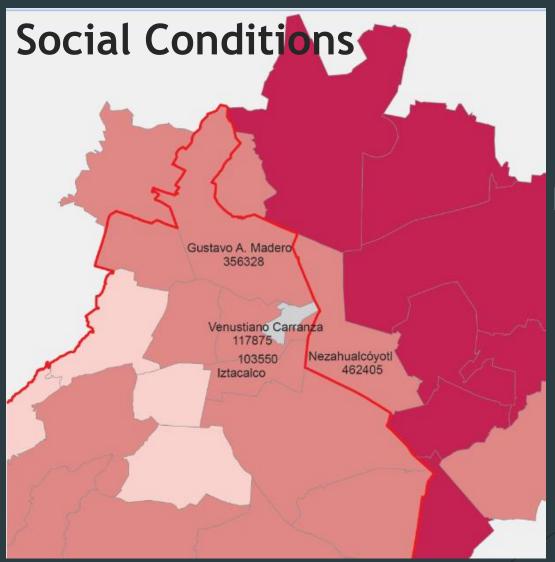
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▶ The great urban transformation that will take place in the lands currently occupied by the airport is an unrepeatable possibility of building a smart energy city.









#### People in Poverty

8% - 20%

20% - 40%

40%-60%

#### Project and principles



Social Cohesion



Transparency and Dialogue



Sustainable Development

- Connectivity
- Smart Energy
- Reconciliation with water cycles



Employment and economic growth

## 5

The Energy Reform in Mexico, which has led to the liberalization and rise of oil prices, opens the door to investment opportunities in smart energies.



# Office for Investment Promotion in Energy Efficiency

- Institutional framework for energy transition in Mexico City.
- Promotion and support of private sector projects
- Development of smart energy firms
- Link with private sector
- Obtaining resources for projects
- Interinstitutional coordination
- Studies and recommendations for public policies

# Office for Investment Promotion in Energy Efficiency

#### Current Projects

- Efficient SMBs Project
- Efficient Energy Project for Tortilla Mills
- Food Cluster Project
- Development and Production of National Electric Bikes Project
- ► Technical Training in Renewable Energies Program

